

# *Dr. Muhammad Ismail*

---



## **PERSONAL INFORMATION**

Date of Birth                      01 February, 1979  
Nationality                        Pakistani  
Permanent Address              House # P-204, Street # 3, Madan Pura,  
Faisalabad  
Mobile #                            0321-7824804  
E. Mail                              [ismail\\_nibge@yahoo.com](mailto:ismail_nibge@yahoo.com)

## **CAREER OBJECTIVE**

I would like to investigate the effects of environmental pollutants especially pesticides on animals. How these environmental pollutants causes DNA damage and cytogenetic changes.

## **QUALIFICATION**

- 2006-2014:** PhD (Biotechnology) from NIBGE Faisalabad/Affiliated with Quaid-i-Azam University, Islamabad
- 2003-2005:** M.Phil (Zoology) from University of Agriculture Faisalabad, Faisalabad
- 1999-2001:** M.Sc (Zoology) from Government College Faisalabad/Affiliated with University of the Punjab, Lahore
- 1997-1999:** B.Sc (Biological Sciences: Zoology, Botany and Chemistry) from Government Science College, Faisalabad, affiliated with University of the Punjab
- 1994-1996:** F.Sc (Pre-Medical) from BISE Faisalabad
- 1992-1994:** SSC/Matriculation (Science Group) from BISE Faisalabad

## **EXPERIENCE**

- 3 years and 2 months teaching and reasearch experience as Assistant Professor (IPFP and Contract) in Department of Bioinformatics and Biotechnology, Government College University, Faisalabad
- 4 years and 7 months teaching experience as Assistant Professor (Visiting) in Department of Bioinformatics and Biotechnology, Government College University, Faisalabad

## **M. PHIL STUDENTS PRODUCED**

## ACADEMIC HONOURS

- Indigenous PhD fellowship from Higher Education Commission (HEC), Pakistan
- Scholarship of Six months research work under Higher Education Commission's Scholarship of International Research Support Initiative Program (**IRSIP**) in **University of California Davis, California, USA**

## RESEARCH TOPIC OF M.Phil (ZOOLOGY)

A Study on Biodiversity of Some Soil Arthropods in Relatively High In Put (HIP) and Low In Put (LIP) Sugarcane Fields.

## RESEARCH TOPIC OF PhD (BIOTECHNOLOGY)

Environmental Genotoxicity of Pesticides in Non target Organisms

## RESEARCH PUBLICATIONS

1. Javed, M.R., Noman, M., Shahid, M., Ahmed, T., Khurshid, M., Rashid, M.H., **Ismail, M.**, Sadaf, M., Khan, F. (2019). Current situation of biofuel production and its enhancement by CRISPR/Cas9-mediated genome engineering of microbial cells. *Microbiological Research* 219. 1–11. **(IF= 5.07)**
2. Khan, M.A., Shahzadi, T., Malik, S.A., Shahid, M., **Ismail, M.** Zubair, M., Iqbal, S. (2019). Pharmacognostic evaluation of turmeric (*Curcuma longa*) extracts in diabetic wound healing. *Journal of Animal and Plant Sciences*. 29(1): 68-74. **(IF= 0.57)**
3. Shahid, M., Akram, M., Khan, M., Zubair, M., Shah, S., **Ismail, M.**, Shabir, G., Basheer, S., Aslam, K., Tariq, M. (2018). A phytobeneficial strain *Planomicrobium* sp. MSSA-10 triggered oxidative stress responsive mechanisms and regulated the growth of pea plants under induced saline environment. *Journal of Applied Microbiology*. 124(6):1566-1579. **(IF= 4.059)**
4. Ali, T., **Ismail, M.**, Asad, F., Ashraf, A., Waheed, U., and Khan, Q. M. (2018). Pesticide genotoxicity in cotton picking women in Pakistan evaluated using comet assay. *Drug and Chemical Toxicology*, 213-220. **(IF= 2.597)**
5. **Ismail M**, Ali R, Shahid M, Khan MA, Zubair M, Ali T, and Khan QM. (2018). Genotoxic and Hematological Effects of Chlorpyrifos Exposure on Freshwater Fish *Labeo rohita*. *Drug and Chemical Toxicology*. 41(1), 22-26. **(IF= 2.597)**

6. Shahid, M., Hussain, B., Riaz, D., Khurshid, M., **Ismail, M.**, and Tariq, M. (2017). Identification and partial characterization of potential probiotic lactic acid bacteria in freshwater *Labeo rohita* and *Cirrhinus mrigala*. *Aquaculture Research*. 48(4), 1688-1698. **(IF= 2.184)**
7. **Ismail M**, Khan QM, Ali R, Ali T, Mobeen A. (2014). Genotoxicity of chlorpyrifos in freshwater fish *labeo rohita* using alkaline single-cell gel electrophoresis (comet) assay. *Drug Chem Toxicol*, 37 (4), 466-471. **(IF= 2.597)**
8. **Ismail M**, Khan QM, Ali R, Ali T, Mobeen A. (2014). Evaluation of the genotoxicity of chlorpyrifos in common Indus valley toad, *Bufo stomaticus* using alkaline single-cell gel electrophoresis (Comet) assay. *Agri. Sci.* 5, 376-382.
9. Ali R, Guo X, Lin H, Khan QM, **Ismail M**, Waheed U, Ali T, Bhalli JA. (2014). Mutant frequency in comparison to oxidative DNA damage induced by Ochratoxin A in L5178Y tk<sup>+</sup>/- (3.7.2C) mouse lymphoma cells. *Drug Chem Toxicol*, 37 (2), 227-232. **(IF= 2.597)**
10. Ali R, **Ismail M**, Bhalli JA, Mobeen A, Khan QM. (2013). Effect of temperature on Ochratoxin A production in common cereals by *Aspergillus* species. *J Anim Plant Sci.* 23 (5): 1316-1320. **(IF= 0.57)**
11. Azeez Q, Sajjad-ur-Rahman, Waheed U, **Ismail M**, Ali R, Ali T. (2012). Application of nitrocefin test for the direct detection of methicillin resistant *Staphylococcus aureus* from bovine mastitis milk samples. *Pak. J Life Soc Sci.* 11(2): 96-101.
12. **Ismail M**, Ali R, Ali T, Waheed U, Khan QM. (2009). Evaluation of the acute toxicity of profenofos and its effects on the behavioral pattern of fingerling common carp (*Cyprinus carpio* L., 1758). *Bull Environ Contam Toxicol.* 82:569–573. **(IF= 2.807)**
13. Siddiqi MJI, Rana SA, **Ismail M**, Suhail A. (2006). Role of antennal sensilla of soil beetles as food selection in the fields of sugarcane. *Pak. Entomol.* 28 (2) 39-44.

### **POSTER PRESENTATION**

- Ameena mobeen, Qaiser M. Khan, **Muhammad Ismail** and Sohail Anjum. 2013. Acute toxicity and mutagenicity assessment of pesticides. International conference on Biotechnology: Prospects and challenges in Agriculture, Industry, Health and Environment. April 22-26, 2013, P 145.

## **ABSTRACT AND TALK**

- **Muhammad Ismail**, Qaiser Mahmood Khan, Muhammad Shahbaz, Shumaila Noreen, Rahat Ali, Tayyaba Ali, Usman Waheed and Amina Mobeen. (2010). Assessment of Acute toxicity of Profenofos and Cypermethrin and Their Effects on the Behavioral Pattern of Grass Carp (*Ctenopharyngodon idella*). 6<sup>th</sup> Executive Management Seminar on “*The Current Environmental Pollution Scenario of Pakistan; Findings and Remediation*” at PINSTECH, Islamabad. **Abstract** pp 5-6.

## **TRAININGS AND WORKSHOPS**

- ❖ One day seminar on “Next Generation Chromatography and Flow Cytometry”. July 30, 2019. Organized by the Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ “World DNA Day” Certificate of appreciation for Organizing Poster/ Model Competition & Seminar on Epitome of DNA and Forensics. April 25, 2019. Organized by Society of Bioinformatics and Biotechnology & Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ Two-day Workshop on “Phylogenetic Analysis; Methods & Applications”. April 15-16, 2019. Organized by the Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ Certificate of appreciation for contributing as organizer in Poster and Model Competition on “World DNA Day”. Celebrating the 65<sup>th</sup> Anniversary of the discovery of DNA structure. April 25, 2018. Organized by Department of Bioinformatics and Biotechnology & Society of Bioinformatics and Biotechnology (SBNB), Government College University Faisalabad.
- ❖ Certificate of participation in “Cell Culture and Protein Biology Innovations” February 20, 2018. Organized by Department of Bioinformatics and Biotechnology, Government College University Faisalabad in collaboration with Invitrogen, Thermo Scientific and The Worldwide Scientific
- ❖ “World DNA Day”. Anniversary of the discovery of DNA DOUBLE HELIX & Completion of the HUMAN GENOME PROJET. April 25, 2017. Organized by Society of Bioinformatics and Biotechnology (SBNB) & Department of Bioinformatics and Biotechnology, Government College University Faisalabad.

- ❖ 2<sup>nd</sup> National Training Course on “Molecular Methods in Biotechnology”. March 13-17, 2017. Organized by Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ 3<sup>rd</sup> National Symposium on “Advancements in Biotechnology”. December 20-23, 2016. Organized by Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ Quiz, Model & Poster Competition "*Novel Vista in Computational Sciences*". April 21, 2016. Organized by Pakistan Society for Computational Biology (PSCB) in Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ Workshop on "**Digital Library**". Held on September 1-7, 2015. Office of Research, Innovation & Commercialization Government College University Faisalabad.
- ❖ **Capacity Enhancement in Biosafety Evaluation of GM Crops & Launching Ceremony of ISAAA Brief-49**. May 11, 2015. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ 1<sup>st</sup> National Training Course on “Molecular Methods in Biotechnology”. December 08-12, 2014. Organized by Department of Bioinformatics and Biotechnology, Government College University Faisalabad.
- ❖ International conference on “**Biotechnology: Prospects and challenges in Agriculture, Industry, Health and Environment**”. April 22-26, 2013. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ National Training Course on “**Handling and Use of Laboratory Animals for Biotechnology and Biomedical Research**”. On 2-4 April, 2013. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ Training Course “**Chemical/Laboratory Safety**”. On 01 March, 2011. Held by Office of Environmental Health and Safety University of California Davis, California, USA.
- ❖ *Animal Care and Use*. 08-02-2011. Held by Safety Services, University of California Davis, California, USA.
- ❖ 6<sup>th</sup> Executive Management Seminar on “*The Current Environmental Pollution Scenario of Pakistan; Findings and Remediation*”. From 27-29 Oct, 2010. Held in Pakistan Institute of Nuclear Science and Technology (PINSTECH), Islamabad.
- ❖ One day Research Workshop on "**Writing Research Proposals**". on June 25, 2010. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad.

- ❖ Training course on “**Molecular Diagnosis of Animal Pathogens and Advanced Biotechnological Techniques**”. From 02-13 February, 2009. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ One day Seminar on “**Pesticides and Bioinoculants**”. On 25<sup>th</sup> June, 2008. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ “**28<sup>th</sup> Pakistan Congress of Zoology**”. From March 18-20, 2008. Held at Government College University, Faisalabad
- ❖ 5<sup>th</sup> Annual National Training Course on “**Modern Techniques in Biotechnology**”. From May 28- June 01, 2007. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad
- ❖ National Training Course on “**Molecular Detection of RNA Viruses**”. From April 24-26, 2007. Held in National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad

## REFERENCES

- **Dr. Qaiser Mahmood Khan**, Deputy Chief Scientist, Ex. Head of Environmental Biotechnology Division, National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan
- **Dr. Javed Ahmad Bhalli**, Director of Safety and Toxicology, Frontage Laboratories Exton, Pennsylvania, USA
- **Dr. Mahmood-ur-Rahman Ansari**, Associate Professor, Department of Bioinformatics and Biotechnology, Government College University Faisalabad (GCUF), Faisalabad, Pakistan.
- **Dr. Muhammad Zubair**, Associate Professor, Department of Bioinformatics and Biotechnology, Government College University Faisalabad (GCUF), Faisalabad, Pakistan.
- **Dr. Muhammad Shahid**, Assistant Professor, Department of Bioinformatics and Biotechnology, Government College University Faisalabad (GCUF), Faisalabad, Pakistan.